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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,196

09/17/2003

Thomas Batzinger

131253 (1306-30)

3895

7590

01/12/2005

GE Global Research  
Docket Room K-1/4A59  
One Research Circle  
Niskayuna, NY 12309

EXAMINER

LAU, TUNG S

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/664,196

Applicant(s)

BATZINGER ET AL.

Examiner

Tung S Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>See office action</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Information Disclosure Statement

1. Information Disclosure Statement filed on 12-20-2004 is acknowledged by the examiner; A copy of a signed PTO-1449 attached with this office action.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor (U.S. Patent 4,425,193).

Regarding claim 1:

Taylor discloses a system for monitoring defects in a structure, the system comprising: a power supply for supplying a direct current to a monitoring area of the structure and a reference (Col. 5, Lines 29-59), a measurement circuit for measuring a potential drop across at least two contact points of the monitoring area and at least two contact points of the reference (fig. 1, unit 23, 19, 12), and a processor having a multi-channel interface for simultaneously receiving potential drops (fig. 1, unit 18, 19, 21, 23, 24); wherein the processor is adapted to determine a ratio of the monitoring area potential drop to the reference potential drop indicative of a percentage change in a thickness of the structure (fig. 4-8, Col. 4-5, Lines 50-59, Col. 8-9, Lines 52-3).

Art Unit: 2863

Regarding claim 11:

Taylor discloses a method for monitoring defects in a structure, the method comprising the steps of: supplying a direct current to a monitoring area of the structure and a reference (Col. 5, Lines 29-59), measuring a first potential drop across at least two contact points of the monitoring area while simultaneously measuring a first potential drop across at least two contact points of the reference (fig. 1, unit 18, 19, 23); determining a ratio of the monitoring area potential drop to the reference potential drop indicative of a percentage change in a thickness of the structure and simultaneously communicating each of said first potential drops to a processor to enable the processor to read each of the potential drops simultaneously (fig. 4-8, Col. 4-5, Lines 50-59, Col. 8-9, Lines 52-3).

Regarding claim 2, Taylor further discloses the reference are the same material as the structure (abstract); Regarding claim 3, Taylor further discloses the reference is electrically coupled to the structure (fig. 1, unit 23, fig. 3); Regarding claim 4, Taylor further discloses the reference includes a first current injection port for coupling the power supply to the reference and the structure includes a second current injection port for coupling the power supply to the structure, wherein current will flow from the first current injection port to the second current injection port (fig. 1, unit 18, 19, 23, 21, 24, 22); Regarding claim 5, Taylor further discloses the reference includes a plurality of current injection ports for coupling the power supply to the reference and the structure includes a plurality of current

injection ports for coupling the power supply to the structure, wherein a plurality of currents may be applied in different directions across the reference and structure (Col. 1-2, Lines 46-63, fig. 1, unit 17, 18, 19, 21, 23, 24); Regarding claim 6, Taylor further discloses monitoring area includes a plurality of contact points arranged in a matrix for measuring a potential drop across any pair of contact points (Col. 1, Lines 5-45, fig. 3); Regarding claim 7, Taylor further discloses measuring circuit measures the plurality of contact points simultaneously (Col. 1-2, Lines 46-63); Regarding claim 8, Taylor further discloses a battery (fig. 1, unit 17); Regarding claim 9, Taylor further discloses displaying a value ratio in a location on the structure (fig.3 ,unit 33b, 33a, fig. 4-8); ); Regarding claim 10, Taylor further discloses a communication module for transferring the measured potential drops and the ratio to other systems (fig. 1, unit 26, 18, 19, 23); Regarding claim 15, Taylor further discloses averaging the monitor points (fig. 4, unit e, f, c, d); Regarding claim 16, Taylor further discloses includes a plurality of contact points and the measuring step includes measuring a potential drops across the plurality of contact points simultaneously (fig. 1, unit 12, 18, 19, 23, 24); Regarding claim 17, Taylor further discloses location of the structure (Col. 9, Lines 50-54); Regarding claim 18, Taylor further discloses supply direct current sequentially and measuring potential drop at least two contact point (Col. 5-6, Lines 30-2); Regarding claim 19, Taylor further discloses vector representation including magnitude and direction (fig. 4-5); Regarding

claim 20, Taylor further discloses vector relation to physical location (fig. 4-8, Col. 9, Lines 51-55.

### ***Claim Objections***

3. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach regarding claim 12, monitoring a potential drop when no current supplied to the reference.

Claims 13-14 are objected due to their dependency on claim 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-11 and 15-20 have been considered but are moot in view of the new ground(s) of rejection. However,

applicant's arguments filed 12/20/2004 have been fully considered but they are not persuasive.

A. Applicant argues that the prior art does not show the 'processor having a multi-channel interface for simultaneously receiving potential drops'. Taylor discloses 'processor having a multi-channel interface for simultaneously receiving potential drops' in fig. 1, unit 19, 23, 18, 24, Col. 5-6, Lines 29-2. Reminds to the applicants While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allowed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory

Art Unit: 2863

action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL



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